REMARKS

This Request for Reconsideration is submitted in response to an Office Action finally rejecting the claims dated August 6, 2003. Applicant filed a Notice of Appeal on February 6, 2004 with a request for an extension of time. This response is filed with a Request for Continued Examination, and the Notice of Appeal is hereby withdrawn without prejudice.

I. Status of the Claims

In the Official Action dated August 6, 2003, claims 2, 5, 11, 17, 23 and 49 are allowed. Please amend claims 3, 15, 50 and 51 as indicated above. Claims 2, 3, 5, 11, 15, 17, 23, 49, 50 and 51 are now pending in the application. Claims 2, 3, 5, 11, 15, 17, 23, 49, 50 and 51 are independent claims.

Applicant acknowledges the Examiner's citation of statutory authority as a basis for claim rejections.

II. Rejections under 35 U.S.C. § 103(a)

The Examiner has rejected claims 3, 15, 50 and 51 under 35 U.S.C. § 103(a) as being unpatentable over Gasper et al (U.S. Patent No. 5,278,943) in view of Swaminathan et al (U.S. Patent No. 5,751,903) and further in view of Holzrichter et al (U.S. Patent No. 5,729,694).

Claims 3 and 50 are method and apparatus claims respectively and are directed to a speech information processing method and apparatus of generating a speech segment dictionary for holding a plurality of encoded speech segments. In the method and apparatus, quantization code books are constructed using speech segments stored in a speech database (111) (S403 in Fig. 4), and the speech segments stored in the speech database are encoded using the constructed quantization code books (S405 in Fig. 4), and the encoded speech segments are stored in the speech segment dictionary (S406 in Fig. 4).

According to the invention of claims 3 and 50, since the speech segments stored in the speech database are encoded using the constructed quantization code books constructed using the speech segments stored in the same speech database, the speech segments can be efficiently encoded using the quantization code book constructed using the speech segments stored in the same speech database.

Claims 15 and 51 are method and apparatus claims respectively and are directed to a speech information processing method and apparatus of decoding encoded speech segments stored in the speech segment dictionary, using the constructed quantization code books, and of synthesizing speech by using the speech segment dictionary which stores the speech segments, as described in claim 3.

Regarding the cited art, the Examiner states that Gasper discloses encoding speech and storing an encoded speech segment in a speech segment dictionary (claim 13 line 6, and column 2 lines 64-68).

Applicant submits that Gasper derives speech samples from the input voice of a desired person and extracts and encodes constitute speech segments to store in voice reference files. Gasper further inputs speech text and combines the encoded constituted speech segments for providing a digital speech signal representing the input text.

However, Applicant submits that Gasper does not teach or suggest constructing quantization code books using speech segments that are to be encoded. Further, Gasper is silent on encoding the speech segment using the quantization code books which are constructed using speech segments to be encoded.

Applicant submits that Swaminathan et al discloses an encoding and decoding method for digitized speech signals by selectively using backward prediction for the short-time predictor

According to the invention of claims 3 and 50, since the speech segments stored in the speech database are encoded using the constructed quantization code books constructed using the speech segments stored in the same speech database, the speech segments can be efficiently encoded using the quantization code book constructed using the speech segments stored in the same speech database.

Claims 15 and 51 are method and apparatus claims respectively and are directed to a speech information processing method and apparatus of decoding encoded speech segments stored in the speech segment dictionary, using the constructed quantization code books, and of synthesizing speech by using the speech segment dictionary which stores the speech segments, as described in claim 3.

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However, Applicant submits that Gasper does not teach or suggest constructing quantization code books using speech segments that are to be encoded. Further, Gasper is silent on encoding the speech segment using the quantization code books which are constructed using speech segments to be encoded.

Applicant submits that Swaminathan et al discloses an encoding and decoding method for digitized speech signals by selectively using backward prediction for the short-time predictor

parameters and fixed codebook gain of a speech signal. However, applicant submits that Swaminathan does not teach or suggest constructing quantization code books using the speech segments which are to be encoded. Further, Swaminathan is silent on encoding the speech segment using the quantization code books that are constructed using speech segments to be encoded.

Applicant submits that Holzrichter et al (US Patent 5,729,694) discloses storing feature vectors for each trained sound segments into a code book location or library locations (column 48, lines 65-68 through column 49, line 5). In other words, Holzrichter only discloses storing the feature vectors into the code book or a database, but does not teach or suggest constructing quantization code books using speech segments stored in a speech database and encoding the speech segments using the constructed quantization code books and storing the encoded speech segments in the speech segment dictionary.

At least for these reasons, Applicant submits that the inventions recited in claims 3, 15, 50 and 51 are not taught or suggested by Gasper in view of Swaminathan, further in view of Holzrichter.

III. Request for Reconsideration

Applicants respectfully submit that the claims of this application are in condition for allowance. Accordingly, reconsideration of the rejection and allowance is requested. If a conference would assist in placing this application in better condition for allowance, the undersigned would appreciate a telephone call at the number indicated.

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PATENT
Docket No.: 36409-00100

Respectfully submitted,
Milbank, Tweed, Hadley & McCloy LLP

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Chris L. Holm
Reg. No.: 39,227

Milbank Tweed Hadley & McCloy LLP
1 Chase Manhattan Plaza
New York, NY 10005
(212) 530-5000 / (212) 530-5219 (facsimile)

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